

10. (THREE TIMES AMENDED) A decrypting apparatus, comprising:

a circuit unit, having at least one programmable logic device, to form a decrypting circuit with the programmable logic device corresponding to given decrypting specifications;

a change data generating unit, to generate automatically change data for changing the encrypting specification; and

a changing unit, coupled to said circuit unit and said change data generating unit, to read the change data [for changing the decrypting specifications] and to change automatically a structure of the decrypting circuit corresponding to the change data by changing a circuit structure of the programmable logic device without removal from said decrypting apparatus.

19. (TWICE AMENDED) A signal processing apparatus, comprising:

circuit means, having at least one programmable logic device, for forming a circuit corresponding to given specifications; [and changing]

change data generating means for [reading] automatically generating change data for changing the specifications of the circuit, the change data representing one of encrypting specifications or decrypting specifications[.]; and

changing means for automatically changing a structure of the circuit corresponding to the change data.

20. (TWICE AMENDED) An encryption processing system for use with a communication system for exchanging encrypted data through a communication network, comprising:

encrypting circuit means, having at least one programmable logic device, for forming an encrypting circuit corresponding to given encrypting specifications;

change data generating means for automatically generating decryption change data for changing the encrypting specifications;

encryption changing means for reading the encryption change data for changing the encrypting specifications and automatically changing a structure of the encrypting circuit corresponding to the encryption change data;

decrypting circuit means, having at least one programmable logic device, for forming a decrypting circuit corresponding to given decrypting specifications;

decryption change data generating means for automatically generating decryption change data for changing the decrypting specifications; and

15  
 decryption changing means for reading the decryption change data for changing the decrypting specifications and automatically changing a structure of the decrypting circuit corresponding to the decryption change data.

21. (TWICE AMENDED) An encrypting apparatus, comprising:  
encrypting means, composed of an unit of which circuit connections for encrypting data can be changed corresponding to an external command, for encrypting data;  
change data generating means for automatically generating change data to change encrypting specifications; and  
changing means for changing the circuit connections of said encrypting means corresponding to the encrypting specifications of the encrypting algorithm only when the encrypting specifications are changed.

22. (TWICE AMENDED) [An] A decrypting apparatus, comprising:  
decrypting means, composed of an unit of which circuit connections for decrypting data can be changed corresponding to an external command, for decrypting data;  
change data generating means for automatically generating change data to  
5 change decrypting specifications; and  
changing means for changing the circuit connections of said decrypting means corresponding to the decrypting specifications of the decrypting algorithm only when the decrypting specifications are changed.

23. (TWICE AMENDED) An encrypting method, comprising:  
forming an encrypting circuit corresponding to given encrypting specifications with at least one programmable logic device;  
reading change data for changing the encrypting specifications; and  
a change data generating unit, to generate automatically change data for changing the encrypting specification; and  
automatically changing a circuit structure of the at least one programmable logic device corresponding to the change data without removal of the at least one programmable logic device from the encrypting circuit.

24. (TWICE AMENDED) A decrypting method, comprising:  
forming a decrypting circuit corresponding to given decrypting specifications with at least one programmable logic device;